



# *The Blurb*



*Newsletter of The Phil-Mont Mobile Radio Club*

**63 Years of Public Service, 1949 to 2012**

Volume 62 Number 9

[www.phil-mont.org](http://www.phil-mont.org)

September 2012

---

*1930-2012*



**Neil Armstrong in 1966 – the first man on the moon –  
July 20, 1969**

---

***Labor Day is Monday, September 3rd***

*Ed asks for directory update info –see page 4*

*Andrew, KC2PMW shares some thoughts- see page 4*

---

***JOTA coming soon - Boy Scouts getting radio-active!***

The 55th *Jamboree On The Air* will take place on 20 and 21 October 2012

This year's theme is: **How big is your world?**

**<http://www.arrl.org/jamboree-on-the-air-jota>**

***Watch next month's Blurb for more info!***

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                  |                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                               |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><i>The Blurb</i> is published monthly by and for the members of The PHIL-MONT MOBILE RADIO CLUB, Inc., whose purpose is to promote Amateur Radio in general, and Mobile Radio in particular. <i>Copying and quoting</i> is permitted with a credit line. We gladly exchange publications with other amateur radio clubs. Requests should be sent to the Editor. <i>Subscriptions</i> are available to non-members for \$12, addressed to the Treasurer.</p> <p><b>Editor:</b> Rick DeVirgiliis <b>ND3B</b><br/>nd3b@arrl.net 215-908-7225</p> <p><b>Labels and mailing:</b> <b>KB3IV</b></p> <p><b>Submissions deadline:</b> All copy must be in the hands of the Editor by the 20th of the previous month.</p> |                                                                                                                  | <p><b>Directors:</b></p> <p><b>WU3I (12)</b><br/><b>W3MHP(12)</b><br/><b>KB3SJS(12)</b><br/><b>WA3KIO(13)</b><br/><b>N3QV(13)</b><br/><b>ND3B(13)</b><br/><b>KB3IV(A)</b></p>                                                                                                                                                               | <p><b>Contact Phil-Mont: P.O. Box 88</b><br/><b>Abington, PA 19001</b><br/><a href="http://www.phil-mont.org">http://www.phil-mont.org</a><br/>Website: Eric N3QV &amp; Andrew KC2PMW</p> <p><b>For club information:</b> Contact any club officer, or the repeaters listed below. Address or club directory changes and articles for the membership e-mail list should be sent to: KB3IV</p> |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                  | <p><b>Sunday Morning Net Schedules</b></p> <ul style="list-style-type: none"> <li>• <b>2 Meter/ 70cm Net</b>..... at 0930L on W3QV repeater</li> <li>• <b>10-on-10 Net</b> ..... at 1000L 28.393 MHz USB (±QRM)</li> <li>• <b>75 meter Net</b> ..... at 1020L 3.993 MHz LSB</li> <li>• <b>ARES</b> at 2100L on the W3QV repeater</li> </ul> |                                                                                                                                                                                                                                                                                                                                                                                               |
| <p><b>Committees</b></p> <p>Audit: NS3K<br/>Blurb folding: KB3IV &amp; N3GLU<br/>Directory: KB3IV</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | <p>DX: N3MT<br/>Emerg.Coor: K3HWE<br/>Field Day: KE3QB<br/>Internet: N3QV &amp; KC2PMW<br/>Membership: N3XKE</p> | <p>Net Control: KB3IV<br/>Publicity: W3RM<br/>Program: Club VP<br/>Public Service: KE3QB<br/>Refreshments: W3AOK<br/>Repeater: W3AOK</p>                                                                                                                                                                                                    | <p>Scholarship: W3RM<br/>Skywarn: WX3PHI<br/>Sunshine: N3GLU<br/>VE Program: NS3K<br/>Welcome: N3UBY<br/>Youth: KC2PMW</p>                                                                                                                                                                                                                                                                    |

***All visitors are welcome!***

The club meets at 7:30 PM on the *second* non-holiday Wednesday each month except July and August at **Roxborough Memorial Hospital**, 5800 Ridge Avenue, Philadelphia, PA 19128  
Maps and directions are available at [www.phil-mont.org](http://www.phil-mont.org).

**License Examinations** are held on the fourth **non-holiday Thursday** each month at **Community Ambulance Association, 1414 E. Butler Pike, Ambler PA 19002**  
Registration begins at 7:00 P.M. Applicants should contact Jim McCloskey NS3K at 215-275-2979 or [jmccloskey@msn.com](mailto:jmccloskey@msn.com) for the latest information.

**Club Stations W3QV/R: The Jim Spencer Memorial Repeater System**  
Ridge & Port Royal Avenues, Philadelphia, PA **Trustee: W3RM**  
**147.03 MHz + PL 91.5 Hz 444.80 MHz + PL 186.2 Hz**  
Reach us on EchoLink through W3QV-R  
**W3AA Trustee: WU3I**  
**W3EM: Field Day/special event station Trustee: N3QV**

***The Officers***

**Pres:** KB2ERL Bob Nicotera [bnic1903@msn.com](mailto:bnic1903@msn.com)  
**Vice Pres:** W3STW Al Tribble [wstw@juno.com](mailto:wstw@juno.com)  
**Sec:** KB3MIV Jen Miller [jencaz29@gmail.com](mailto:jencaz29@gmail.com)  
**Treas:** W3RM Richard A. Moll [roger.mike@verizon.net](mailto:roger.mike@verizon.net)  
**Asst. Treas:** N3MT Michael P. Taraborrelli [michaelmt\\_1999@yahoo.com](mailto:michaelmt_1999@yahoo.com)

## *The Prez Sez ...*



Looking forward to seeing many of you at the Sept. 12th PMRC meeting. We have many new and exciting activities planned for our members in the coming months.

**73, Bob KB2ERL**

## *Phil-Mont Birthdays & Tidbytes*

### *September Birthdays*

- 01 Sol Volen - N3UBY
- 02 Gregory Malone - WA3GM  
Susan Lamont (XYL N3SHM)
- 05 George Walmsley - W3DO
- 13 Marge Concordia (XYL WB3KAC)
- 15 Bob Freer - W3YLT
- 17 Vikye Swanson (XYL N3GLH)
- 20 Michael Taraborrelli - N3MT
- 23 Eileen Kerrigan (YL ND3B)  
John Simon - KB3SJS
- 24 Virginia Buono (XYL WA3ADI)
- 26 Emily Mae Campbell is 4 today!
- 28 Penny Uebelhoer (XYL KA3IRJ)

### MEMBERSHIP STATS

At press time P.M.R.C. has:  
83 FULL PAID MEMBERS  
10 FAMILY MEMBERS  
3 YOUTH MEMBERS  
1 HONORARY MEMBER



*There are two VE sessions in September:  
Thursday evening the 27<sup>th</sup> and  
Saturday the 8<sup>th</sup>*

*As always, many thanks to our VE team!*

## *From the Secretary...*

*will resume in October*

*(There were no meetings in August.)*

## IMPORTANT UPCOMING DIRECTORY SUPPLEMENT

With the October Blurb you will receive the 2012 Directory Supplement. It will contain new member information, plus corrections and additions received during the last six months. If you have any changes that you have not previously sent please do so now.

In addition, the Supplement will feature the "Electronic Mailing list" of PMRC members who have sent me their E-Mail addresses.

If you would like your cell phone listed in place of your work phone, please indicate your change and the cell number, followed by (cp).

If you have changes, send your information to me no later than 9/12 at: kb3iv@comcast.net or via snail mail at the address shown in your directory. (Hey, that's **classic** mail please! -ed)

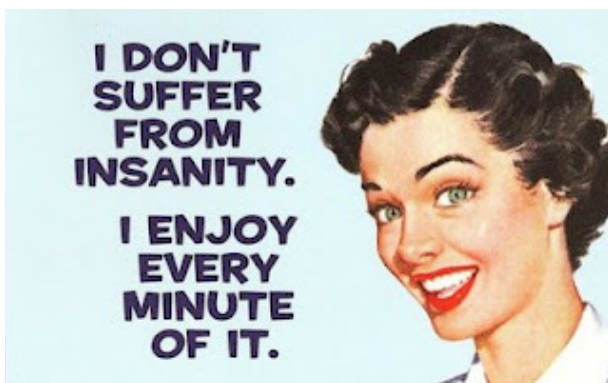
## *A few words from Andrew, KC2PMW*

Fellow Phil-Monters,

As many of you know, earlier this year I was given the honor of being awarded one of the 2012 Phil-Mont Mobile Radio Club scholarships. To date, I am not sure which of the scholarships I was awarded, but that isn't important. What is important is the generosity that all of the members of the club have shown over the past years that have made the scholarship program possible. For this, I would like to thank everyone in the club. Without your support, this great program couldn't happen. While I may have a bit of a different interest in the scholarship program than most others for this year and for the next couple, it is something that I know will always be important to me and the numerous other people who have in the past or will in the future be named recipients of the scholarships. On my behalf and theirs, thank you.

As a side note, since the FAR has taken a substantially interesting twist and applied it to my scholarship bio (if you're interested, ask W3RM about it sometime), I thought I could provide something a little bit closer to reality. I am 19 years old and will be a sophomore at Rowan University in Glassboro, NJ studying Electrical and Computer Engineering (one major with a long name). When not playing radio or studying, I am an active member of Rowan EMS and this year will be taking an extra class at night to become licensed as an EMT-B in New Jersey. I have an Extra Class license, am active on the two or three local repeaters, and try to get on HF as much as I can.

Thanks and 73 DE Andrew, KC2PMW



I think this may be my family motto... - ed

**THIS AND THAT**  
**Miscellaneous Ramblings**  
**Bob Thomas, W3NE**



*Professor Bob, W3NE*

**JOHN L. REINARTZ**  
**“... on whose shoulders we stand”**  
Bob Thomas, W3NE

The subtitle of this article alludes to a phrase often heard in reference to pioneers who led the way in years gone by with developments of such fundamental importance they continue to enrich our lives even today. They become the foundation upon which successors have built today's technology. A prominent early innovator in the field of radio communications was John Leo Reinartz who came to this country with his family from Germany in 1904 at the age of 10. Although his name is virtually unrecognized today, Reinartz made such profound contributions to the art and science of communications he has justifiably been called “The Father of Short Wave Radio” . . . and for very good reasons, as we shall see.

The young Reinartz became captivated by radio only two years after his arrival here. He assembled a station with a low power spark transmitter and a primitive receiver using a coherer detector. The impecunious boy made his coherer by mixing particles of nickel and iron obtained by filing a Buffalo Nickel and a nail. The particle mixture was placed loosely in a glass tube with end terminals connected in series with an antenna tuner, a battery, and a pair of headphones. A spark signal picked up by the antenna caused the metal particles to clump together (cohere) to produce audio in the ‘phones.

The tube was then tapped by a “decoherer” to loosen the particles in preparation for receiving the next spark signal. As crude as they were, coherer and crystal detectors were state-of-the-art until the triode vacuum tube was introduced, leading to invention of the regenerative receiver by Edwin Armstrong.

The basic regenerative receiver utilizes a simple circuit that is sensitive, reasonably selective, and easy to construct, attributes that caused them to be immediately embraced by commercial wireless companies and amateur operators. Early regens were not without their faults, however. Tuning was affected by incidental variations of antenna characteristics caused by wind and climate effects, adjustment of regeneration and several auxiliary circuits was required each time the receiver was tuned to a new frequency, receiver tuning range was quite narrow, and hand capacity made them tricky to tune. John Reinartz, by then 1QP, designed a new receiver circumventing all those disadvantages that was described in the January 1921 *QST*. His tuner had one circuit dedicated to tuning the antenna. Another section did the actual tuning to the desired signal frequency, and a third circuit was devoted to control of regeneration. Attention to parts layout substantially reduced hand-capacity effects. After initial permanent adjustments had been made, the Reinartz Tuner permitted one-knob control for tuning – a first for receivers until then. Furthermore, the Reinartz tuner covered 200 meters to 28 meters, a previously unheard of range and far beyond the 200 meter wavelength where amateurs were permitted to operate then.

The Reinartz tuner took the radio world by storm! Correspondence flooded in to its inventor and *QST*, which ran a follow-up article by Reinartz two months later describing a simplified version. That and successive improvements by Reinartz prompted the editor of *QST* to comment, “It is impossible to keep up with this Reinartz man. Since preparing the foregoing [article] he has dropped around with another ‘trigger circuit’ that knocks its predecessors cold.” For the next several years *QST* ran one or more articles every month on 1QP's tuner with



praise-laden observations and suggestions from users.

Like most inventive individuals IQP's expertise surfaced in many areas. His design for a CW transmitter with unique features was published in the June 1922 issue of *QST*. The following year the Technical Editor of *QST*, described what Reinartz called his *Modulascope*. In the early days of CW, transmitter output often was anything but *Continuous Wave*; it was more like a carrier modulated by inadequately filtered a-c riding on the transmitter plate supply. It gave a so-called CW transmitter's output a raucous, wideband signal which, on the new RST scale, returned reports of T3 (pretty bad) or worse. The Reinartz *Modulascope* was comprised of a pickle jar with a small Tesla coil inside that was coupled to the plate coil of a CW transmitter. A wire whisker attached to the Tesla coil whirled around in a circle, generating a circular arc discharge modulated by bright and dark spots if there was a-c on the transmitter carrier. The display could be visually observed and even photographed – a clever forerunner of the oscilloscope.

Reinartz met 8AB, a French amateur, at the 1923 ARRL national convention in Chicago. Together with ARRL Traffic Manager, IMO the three men agreed to attempt two-way transatlantic QSOs later in the year. All three were using the latest Reinartz Tuner on 100 meters (3.0 Mc.) on the night of November 27, when they copied a long message from 8AB in Nice, France. IMO replied first, then Reinartz using the call 1XAM. The barrier had been broken: Amateur Radio had spanned the Atlantic!

John Reinartz' most influential intellectual achievement, even more significant than his famous tuner (but inexplicably virtually unrecognized by professionals) was his explanation of the effect of the Heaviside Layer (ionosphere) on short wave radio propagation to cause what we now call "skip."

His sweeping conclusions in that article were based on 5000 signal reports recorded from contacts

during 1924 with five cooperating stations in Europe and 18 in the U.S. Reinartz conducted those two-way QSOs between 20- and 60-meters at various times of day and all seasons throughout 1924. His insightful explanations for short wave propagation were published in a landmark article in April 1925 *QST*, "The Reflection of Short Waves." That article, ladies and gentlemen, established the foundation for the DX propagation predictions we use today, and it all came from the fertile mind and experimental efforts of John Leo Reinartz.

Far more than a theoretician, Reinartz put his knowledge of propagation to practical use in 1925 when he made a schedule with 6TS in Santa Monica for a 20 meter contact at high noon. They established the first daylight amateur transcontinental QSO. He then went on to design equipment and take charge of communications onboard Lt. Cdr. Byrd's schooner *Bowdoin* during Byrd's first attempt to fly over the North Pole. It was the first time daily communications had been held with an Arctic station, influencing a high school kid in Cedar Rapids named Art Collins to play hooky so he could get in on the action. After the expedition Reinartz was commissioned a Lieutenant in the Naval Reserve where he did experimental work for the Navy in the next few years.

In 1933 John Reinartz joined RCA where he conducted research on radio propagation and short waves. Possibly borrowing from those experiences, he wrote an in-depth article on how to control the radiation pattern of amateur antennas, published in February 1935 *QST*. He was called to active duty in 1938 as a Naval Personnel Officer with the assignment to assemble a group of experienced radiomen for training and research. By Pearl Harbor he had compiled a list of 720 reserve officers and 3,500 enlisted men who were ready for Navy communications duties. He then moved on to head the Naval Research Laboratory until he was assigned to manage modification of airborne radar sets. Captain Reinartz was discharged in 1946. He returned to RCA for three years until he retired to take a new position with Eimac in California. Reinartz was manager of the Eimac Amateur

Service Department, where he was the company's good will ambassador to the amateur community at the time Eimac tubes were beginning to penetrate the ham market. Reinartz was quite active in local amateur activities as a member of the Santa Cruz County ARC; his last call letters, K6BJ, now identify the club's memorial station

John L. Reinartz acquired 28 U.S. patents and earned the admiration of hams the world over. He was the first recipient of the Hiram Percy Maxim Medal in recognition of his singular achievements. The medal was presented at bedside by ARRL President Herbert Hoover, Jr. only three weeks before John Reinartz passed away on October 5, 1964.

The next time you flip-on your fancy Yaecomwood rice box, press the mike button and feel so proud of yourself when you work some exotic DX, take a moment to reflect on John Reinartz and the other innovative pioneers that came before and after him. It is their broad shoulders on which you are now privileged to stand.

---

### *Have you heard about D-Star?*

Philadelphia Digital Radio Assn meets the first non-holiday Monday of each month at the Community Ambulance Assn 1440 East Butler Pike Ambler, Pa. 19002 at 7:00 pm.

The club has two D-star repeaters on the following frequencies: On two meters - 146.61 (-) and on 70 cm 445.18125 (-)

I run a weekly club D-star net on Mondays at 8:00 pm local time on the club 2 meter frequency.

*de Jim, NS3K*

---

---

### *Check out this rope for your antenna project –*

*3/32" Braided Olive Drab - Dacron / Polyester cord*

*This is a high quality braided polyester cord with a breaking strength of 210 pounds. Proudly Made in the U.S.A.!*

**This is a gorgeous solid braid perfect for dipole antennas. Very low stretch and strong. Will withstand the weather & sun for 7 to 10 years.**

*PRICE \$10.00 PER 100 FEET  
SOLD IN 100 FOOT LOTS  
CONTACT STEVE WU3I AT  
WU3I@ARRL.NET*



**Ah yes, I remember it well!**

***September at Phil-Mont***

2<sup>nd</sup> Sun KA3IRJ NCS  
3<sup>rd</sup> Mon Labor Day  
5<sup>th</sup> Wed Board Meeting  
8<sup>th</sup> Sat VE session in A.M.  
9<sup>th</sup> Sun K3XS NCS  
Grandparents Day  
12<sup>th</sup> Wed General Meeting  
16<sup>th</sup> Sun KB3IV NCS  
23<sup>rd</sup> Sun W3MHP NCS  
27<sup>th</sup> Thurs VE session in P.M.  
30<sup>th</sup> Sun NCS Safety Pin invented - 1849

***Don't forget the ARES net on Sunday nights and  
the Digital net on Tuesday nights.***

-----

***Volunteers Needed***

**3rd Annual Aptalis CF  
Cycle For Life®  
Sunday, October 14th, 2012**

Join us for our 3rd Annual bike tour as we ride through the most scenic terrain that the Delaware Valley region has to offer. Cyclists will start in the Fairmount Park section of Philadelphia riding through historic areas such as East Falls, Mount Airy, and Fort Washington, returning to the city along the banks of the Schuylkill river, passing Manayunk and the famed Boat House Row. Riders will have a choice of two mileage options: 35 miles or 65 miles. Cycle at your own pace.

Jason Brinn, Development Manager  
Cystic Fibrosis Foundation  
Office: (610) 325-6001 Cell: (267) 496-1557  
Fax: (610) 325-6588 jbrinn@cff.org

***First Class Mail***

The Phil-Mont Mobile Radio Club, Inc  
1700 Street Rd. Apt. H3, Warrington PA, 18976

*The Blurb*